

Newborn Screening: Preventing Mental Retardation and Other Serious Health Conditions in Children

Health Problem

- # More than 4 million babies born each year are tested for diseases such as PKU, hypothyroidism, and sickle cell disease through newborn screening programs.
- # Accurate screening ensures that affected babies are identified quickly, that cases are not missed, and that the number of "false positive" results are minimized in order to decrease parental anxiety.
- # Early intervention prevents mental retardation, severe illness, and premature death among affected infants.



Test results must be accurate since the negative health outcomes are irreversible for those cases that are missed.

Laboratory Role

CDC's *Newborn Screening Quality Assurance Program* ensures that newborn screening services are of the highest quality.



- # CDC immediately notifies laboratories about misclassified specimens so that corrective actions can be taken.
- # CDC has been the only comprehensive source of these essential quality assurance services for more than 20 years and is recognized worldwide as the center of expertise in dried blood spot technologies.

Health Impact

- # Each year approximately 3,000 babies with severe disorders are detected.
- # Thousands of children are living healthy and productive lives as a result of newborn screening and CDC's quality assurance program.

Future Opportunities

New technologies and gene discoveries are leading to rapid expansions in newborn screening. As states include new tests in their newborn screening programs, CDC will need to expand its quality assurance efforts to ensure the accuracy of these tests.

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